

GAIRDNER FINE LECTURE

INTRODUCTION

This period in human history is known as the Age of Communication. Never before has human kind been bombarded with as many informational inputs from so many sources, much of it designed to pacify the populace and to propagate the desires of the State in its effort to maintain power. Democracy or not, our environment dictates that each of us must process the available information in a manner that best fits our individual and societal needs if we are to survive what is clearly a hostile environment.

Strangely, ^{however} it now appears that any set of signals or messages is capable of organizing and galvanizing our behaviour, often with disastrous consequences. As the Canadian philosopher, McLuan, once said, "The Medium is the Message", specific content matters little.

Not so in the case of biological information transfer as seen from the scientific perspective. In real life reception is highly specific, the responses are rapid and selective, signal processing is integrative ;i.e., societal, and responses promptly decay in time when the incoming signals are withdrawn. No time for remembrances of things past; survivability is dependent on organization. Once the key elements have been shown effective by natural selection, Nature uses them over and over again. In essence, that is the story of information transfer as revealed in the past decade of research in this area.

In this brief lecture I will describe the contributions that my colleagues and I have made in the hormone transduction field. I will conclude with what I believe is the portent of things to come starting in this Orwellian year of 1984.